

not benefit pediatric immunization. **CONCLUSIONS:** This is the first of this kind of study in Iraq. The study recommended to increase the vaccine availability in public health clinics and to increase in the father and mother's education through media program or through increasing the literacy. The family income or immunization funding weren't important because of the immunization in Iraq is free and supported by world health organization (WHO).

#### PIN40

##### DO PATIENTS AND PHYSICIANS HAVE SIMILAR PREFERENCES FOR HEALTH CARE DECISIONS INVOLVING UNCERTAIN OUTCOMES FOR CHRONIC HEPATITIS B IN GERMANY AND TURKEY?

<sup>1</sup>Lescrauwaet B<sup>1</sup>, Mohamed AF<sup>2</sup>, Johnson FR<sup>2</sup>, Hauber AB<sup>2</sup>

<sup>1</sup>Independent Consultant, Leuven, Belgium, <sup>2</sup>RTI Health Solutions, Research Triangle Park, NC, USA

**OBJECTIVES:** To quantify patient and physician preferences for therapeutic tradeoffs involving efficacy, side-effect risks, and evidence uncertainty in chronic hepatitis B (CHB) treatments. **METHODS:** Physicians who treat CHB patients and adult patients with a self-reported physician diagnosis of CHB completed a web-enabled, discrete-choice experiment survey in Germany and Turkey. Both patients and physicians answered 12 treatment-choice questions. Each question required evaluating a pair of hypothetical CHB medication profiles defined by years the medicine has been studied, probability that patient's viral load remains undetectable for 5 years with possible reversal of disease progression, 5-year treatment-related risks of a fracture and renal insufficiency, and monthly medication cost. Nested-logit and random-parameters logit models were used to estimate preference weights for all attribute levels and the mean relative importance of each attribute. **RESULTS:** A total of 158 physicians and 118 patients completed the survey in Germany. 159 physicians and 117 patients completed the survey in Turkey. German patients ranked risk of renal insufficiency as most important while German physicians ranked efficacy as most important. Turkish physicians and patients disagreed on the relative importance of all treatment attributes. Turkish patients ranked years of evidence as the most important attribute, while Turkish physicians ranked risk of renal insufficiency as most important. German physicians were willing to accept a 0.4% greater increase in fracture risk than patients in return for an additional year of evidence, while Turkish physicians were willing to accept a 3.2% smaller increase in fracture risk than patients for an additional year of evidence. **CONCLUSIONS:** This is the first study to quantify patient and physician preferences for CHB treatment attributes and the first study to elicit physician and patient preferences for years of evidence. We observe different discrepancies between physician and patient preferences in Germany and Turkey. Such discrepancies may interfere with optimal outcomes if not considered in patient-physician interactions.

#### PIN41

##### INFLUENZA VACCINATION RATES AMONG HIGH RISK GROUPS IN THE UNITED STATES

<sup>1</sup>DiBonaventura M, Wagner JS, Goren A

Kantar Health, New York, NY, USA

**OBJECTIVES:** Given increasing concerns about a global influenza pandemic, the aim of the current study was to investigate influenza vaccination rates among high-risk adults and the general U.S. population. **METHODS:** Data from the 2007–2010 U.S. National Health and Wellness Surveys (NHWS) were used. Demographics, comorbidities, and vaccination behavior in the past year were assessed for all respondents, in addition to health-related quality of life (SF-12v2) and resource use (number of emergency room visits and hospitalizations) in the past six months. **RESULTS:** Overall, vaccination rates in the U.S. have steadily increased in the past several years (2007: 30.0%; 2008: 32.8%; 2009: 34.3%; 2010: 37.0%). In 2010, 54.1% of respondents (n=40,541) were at high risk for influenza complications (e.g., over age 50, had chronic conditions such as asthma, diabetes, COPD, cardiovascular conditions, or HIV/AIDS). These high-risk respondents reported significantly lower levels of physical component summary scores (Means=45.3 vs. 52.0, p<.0001) and more ER visits (Means=0.22 vs. 0.17, p<.0001) and hospitalizations in the past six months (Means=0.15 vs. 0.07, p<.0001) than low-risk respondents. Vaccination rates were significantly higher for these high-risk respondents (48.6% vs. 32.2%, p<.0001). No high-risk subgroup reported vaccination rates higher than 67% (respondents with kidney disease and HIV/AIDS reported vaccination rates of 66.5% and 67.3%, respectively). In fact, many high-risk subgroups reported vaccination rates substantially below 50% (caregivers of high-risk patients, respondents with multiple sclerosis, and pregnant women reported vaccination rates of 43.6%, 37.1%, and 30.5%, respectively). **CONCLUSIONS:** Even as new universal recommendations issued by the CDC may have some beneficial impact, overall vaccination rates were well below 50% for the general U.S. population, even among certain high-risk subgroups (e.g., pregnant women, caregivers). Greater emphasis on influenza vaccination, particularly among high-risk patients, may have a long-term health outcome benefit.

#### Infection – Health Care Use & Policy Studies

#### PIN43

##### UTILIZATION AND SPENDING OF ANTIFUNGAL AGENTS IN THE UNITED STATES OUTPATIENT MEDICAID POPULATION: 1991–2009

Desai VC, Cavanaugh T, Guo JJ

University of Cincinnati, Cincinnati, OH, USA

**OBJECTIVES:** The antifungal market demonstrated dynamic changes with increased incidence of fungal infections, resistance to traditional medications, and entry of novel and generic therapies, which may significantly impact Medicaid

budgets for outpatient populations. Our objectives were: To describe utilization and spending trends and to analyze the market share of antifungal agents indicated for invasive fungal infections (IFI), from 1991 to 2009. **METHODS:** The data source used in the study was the National Medicaid State Drug Utilization data from 1991 to 2009, with records on outpatient prescription claims. Antifungal agents in the study included all brand and generic drug names. Medications were identified using National Drug Codes. Quarterly number of prescriptions and reimbursement amount were calculated for the descriptive trends. Market share of spending for each drug was quantified over time. The quarterly price per prescription was calculated by dividing the total reimbursement by the total number of prescriptions. **RESULTS:** After entry of fluconazole in 1993, prescription claims for amphotericin reduced by 95% from 1991 to 1995, and continued decreasing with entry of lipid preparations. Prescription claims for fluconazole rose until 2004, then declined by 25% with entry of new triazoles and echinocandins. More recently, second generation triazoles dominated market share by 70%. Price-per-prescription of lipid preparations of amphotericin decreased by 55%, but increased by 50% for voriconazole. The price-per-prescription of itraconazole continuously rose from \$150–400 from 1992 to 2009. **CONCLUSIONS:** Increased use of lipid preparations of amphotericin may be due to improvement in adverse event profiles, consequently leading to decreased demand for original formulation of amphotericin. The decreased use of brand and generic fluconazole may be due to resistant fungi and emergence of novel agents with broad-spectrum of activity. Itraconazole has a niche market which contributes to its increasing price. Cost-effective decisions appear to drive the use of antifungal agents.

#### PIN44

##### REAL-WORLD EVALUATION OF THE ECONOMIC IMPACT OF DURATION OF DRUG THERAPY IN THE TREATMENT OF HEPATITIS C VIRUS (HCV)

McCombs J<sup>1</sup>, Shin J<sup>1</sup>, Hines P<sup>2</sup>, Saab S<sup>3</sup>, Yuan Y<sup>4</sup>

<sup>1</sup>USC School of Pharmacy, Los Angeles, CA, USA, <sup>2</sup>Global Medical Affairs & Health Outcomes,

Plainsboro, NJ, USA, <sup>3</sup>David Geffen School of Medicine at UCLA, Los Angeles, CA, USA,

<sup>4</sup>Bristol-Myers Squibb, Plainsboro, NJ, USA

**OBJECTIVES:** Pegylated interferon-alpha plus ribavirin [P/R] are the standard of care [SOC] for treating hepatitis C [HCV]. Few studies have evaluated the economic implications associated with P/R treatment in real world practice. This study's objective is to quantify the correlation between P/R treatment duration and health care costs in real-world clinical practice. **METHODS:** Paid claims data for 2003–2008 from a large U.S. health insurance company were used to identify 1,074 HCV patients with a minimum of two years of data following the start of P/R drug therapy [index date]. Patients with a pre-treatment diagnosis for HIV, hepatitis B, cirrhosis, liver cancer or a liver transplantation were excluded. Patients with 24–48 weeks and 48+ weeks of continuous P/R therapy were compared to patients with < 24 weeks of therapy. The multivariate analyses estimated the incremental effects of 24–48 and 48+ weeks of P/R therapy controlling for baseline demographics, diagnostic profile, and prescription drug profile. **RESULTS:** An estimated 82% of HCV patients were viral genotype 1 based on limited available lab data. Genotype 1 patients require 48+ weeks of treatment. 55.6% and 18.5% of study patients complete 24–48 weeks or 48+ weeks of drug therapy, respectively. Drug costs associated with 24–48 weeks of treatment were +\$9,832 [p<0.0001] which were partially offset by savings in medical costs of -\$1,446 [p>0.05] in the first year. First year drug costs for patients with 48+ weeks of treatment were +\$25,696 [p<0.0001] which was partially offset by medical costs savings of -\$5,535 [p<0.05]. However, in the second year, 24–48 weeks of treatment was associated with a combined reduction in both medical and prescription drug costs totaling -\$7,590 [p<0.05]. Patients achieving 48+ weeks of treatment experienced a reduction in total second-year costs of -\$9,334 [p<0.05]. **CONCLUSIONS:** A full course of P/R therapy may reduce total cost over time.

#### PIN45

##### IMPACT OF GOVERNMENT SPONSORED POLIO CONTROL PROGRAM ON KNOWLEDGE, ATTITUDE AND PERCEPTION OF POLIO IN GENERAL COMMUNITY OF BAHAWALPUR, PAKISTAN

Atif M<sup>1</sup>, Asif M<sup>2</sup>, Sulaiman A<sup>2</sup>, Saleem F<sup>2</sup>, Ahmad N<sup>2</sup>, Saqib N<sup>3</sup>, Qamar M<sup>2</sup>

<sup>1</sup>Universiti Sains Malaysia (USM), Penang, Malaysia, <sup>2</sup>The Islamia University of Bahawalpur,

Bahawalpur, Punjab, Pakistan, <sup>3</sup>Ministry of Health, Karachi, Sindh, Pakistan

**OBJECTIVES:** Pakistan is one of the four countries around the world harboring polio. Government of Pakistan is spending lot of resources to eradicate polio in the form of EPI (Extended Program of Immunization) initiated in 1994. The aim of our study is to determine whether this government funded polio control program has any impact on knowledge, attitude and perception of polio in general community. **METHODS:** A cross sectional study was conducted. 477 respondents aged between 25 to 60 years were selected by multistage stratified systematic sampling. KAP were assessed through self administered questionnaire which was developed and validated before administering to respondents. Statistical analysis was done by SPSS 16. **RESULTS:** 225 (47%) respondents were female and 252 (53%) were male. Majority of respondents (95.4%) have heard about polio and 96.9% were of opinion that every child must be vaccinated against polio. 27.3% of respondents believed that it is sufficient to vaccinate a child once in life against polio. 85.1% of subject were not aware that whether it is communicable or non-communicable disease. 31.5% of respondents showed confidence in the capability of polio vaccination team about providing appropriate information. 48.3% of respondents were satisfied from the awareness campaigns of the government propagated through mass media about polio, its prevention and timing of vaccination. **CONCLUSIONS:** Government is spending lot of money on EPI but appropriate knowledge, positive attitudes and perceptions were found in smaller proportion of participants. This study points out that there is need to maximize education programs to make general public aware